

EE 1910

Dr. Johnson

Homework 6

1 – Identify the type of each expression.

20pts

int a,b;

float c,d;

char e,f;

bool g,h;

$a == b$

$c + a * b / d - f$

$a >= c - f + a$

$f / b * c <= a * e / b$

$a \% b * c / f \% g$

2 – evaluate each statement and indicate the type of the result.

30pts

```
int a = 4;   float c = 1.1;   char e = 'a';  
int b = 5;   float d = 2.2;   char f = 'C';  
int foo;    float boo;    char soo;
```

`boo = b - a;`

`boo = b*a;`

`foo = c / d;`

`boo = b % (int) c + 2;`

`foo = (int) b / c * a;`

3 – Evaluate the following expressions individually.

30pts

int a = -3; int b = 6; int c = 1; int d = -2;

$a + b > c + d$

$a - 2 * b + b > c * 2 / 3$

$3 * b / 4 \% 5 \ \&\& \ b$

$d \ \&\& \ c < (b + 5) \ || \ b$

$(4 + 5 * b >= c - 4) \ \&\& \ (c - 2)$

4 – provide a single code statement to achieve each result.

20pts

```
int a, b, c;
```

```
float d,e,f;
```

```
char g, h;
```

multiply **a** by 8 without using the * or + operation

if **c** students share **b** burritos equally, set **a** equal to the minimum number of burritos left over

set **d** equal to the number of whole cups of Cheerios in a box if **e** is the density of Cheerios in cups/volume and **f** is the volume in a box

set **c** equal to 2 if **d** and **f** are equal otherwise
set **c** equal to 8
(only operations we covered allowed)

Given that **g** is any lower case letter, convert it to an upper case character